

Supplementary Online Content

Müssener U, Bendtsen M, Karlsson N, White IR, McCambridge J, Bendtsen P. Effectiveness of short message service text-based smoking cessation intervention among university students: a randomized clinical trial. *JAMA Intern Med*. Published online February 22, 2016. doi:10.1001/jamainternmed.2015.8260.

eMethods. Behavior Change Techniques Used in the Intervention and Examples of Text Messages

eTable. Sensitivity Analysis Exploring the Effects of Departures From the Missing at Random Assumption on Primary Outcomes

This supplementary material has been provided by the authors to give readers additional information about their work.

eMethods. Behavior Change Techniques Used in the Intervention and Examples of Text Messages

The taxonomy suggested by Michie et al¹ was used to specify the content of the intervention in terms of component behavior change techniques. In total, 309 behavior change messages were analyzed (58 in the preparation phase, 157 in the core intervention, and 95 for craving, relapse and weight gain). Of a possible 43 behavior change techniques included in the taxonomy, 32 were used. Most of the messages were classified as addressing motivation, such as prompting commitment and behavior maximizing self-regulatory skills.

Messages During the Preparation Phase

“Tomorrow is your first day without cigarettes. Before you go to sleep you should throw out all cigarettes and get rid of all ashtrays. In many ways this will prepare you mentally for a new day without cigarettes.”

Messages During the Core Program

“You are still hanging in there, great! Keep on going now! You are moving in the right direction. You are on a new path now; it is not a dead end. Keep pushing forward toward a smoke-free and healthier life. This week you will receive 2 text messages a day from us to support you in remaining smoke free.”

“Having a bad day? Please note that it will not get better if you smoke. Make sure to keep yourself busy with things that make you happy. Consider what makes you feel good—and do it.”

Extra Messages for Craving

“Craving a cigarette? Anything that can get you distracted and make you think about other things can help you. Eat something, drink something, do something else than what you are doing at the moment!”

eReference.

1. Michie S, Hyder N, Walia A, West R. Development of a taxonomy of behaviour change techniques used in individual behavioural support for smoking cessation. *Addict Behav.* 2011;36(4):315-319.

eTable. Sensitivity Analysis Exploring the Effects of Departures From the Missing at Random Assumption on Primary Outcomes

Analysis	OR (95% CI)	
	Self-reported prolonged abstinence	Self-reported 4-week point prevalence of complete smoking cessation
Missing at random	2.05 (1.58,2.66)	1.57 (1.19,2.05)
IMOR=0.9	2.05 (1.58,2.66)	1.57 (1.19,2.06)
IMOR=0.8	2.05 (1.58,2.66)	1.57 (1.19,2.06)
IMOR=0.7	2.05 (1.58,2.66)	1.57 (1.19,2.06)
IMOR=0.6	2.05 (1.58,2.66)	1.57 (1.19,2.06)
IMOR=0.5	2.05 (1.58,2.66)	1.57 (1.20,2.06)
Missing=smoking	2.04 (1.57,2.64)	1.57 (1.20,2.05)
Repeated attempts model ¹	1.82 (1.39,2.38)	1.44 (1.09,1.91)
Repeated attempts model ²	1.81 (1.39,2.36)	1.41 (1.06,1.86)
Worst-case*	1.34 (1.06,1.70)	1.02 (0.80,1.31)

*Not pre-specified in the protocol.

¹Defines the number of attempts as the number of modes used (email, text, phone call).

²Defines the number of attempts as the total number of emails, texts and phone calls.

IMOR: informative missing odds ratio. A missing at random analysis assumes IMOR=1.0.